



First Named Inventor:  
Michael Barrow

Filing Date:  
March 22, 1999

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (If known)			
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				

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DAVID FOSTER

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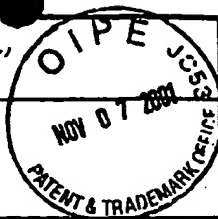
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Attorney Docket No..  
042390P3495C2

Application Number:  
09/274,430

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OTHER ART - NO PATENT LITERATURE DOCUMENTS

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<i>JB</i>		1991 Proceedings, 41 <sup>st</sup> Electronic Components & Technology Conference, May 11-16, 1991, Atlanta, Georgia	
		Bruce Freyman et al., "Surface Mount Process Technology for Ball Grid Array Packaging, Amkor Electronics Inc., Tempe, Arizona, pgs. 81-85	
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Examiner Signature <i>John B. [Signature]</i>	Date Considered <i>09/09/02</i>
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		C.E. Bauer, "Partitioning and Die Selection Strategies for Cost Effective MCM Designs"; W.E. BERNIER et al., "BGA vs QFP: A Summary of Tradeoffs for Selection of High I/O Components"; A.J. MAWER et al., "Plastic Ball Grid Array Solder Joint Reliability Considerations"; Dr. W.C. Mak et al., "Increased SOIC Power Distribution Capability Through Board Design and Finite Element Modeling", Journal of Surface Mount Technology, October 1994	
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*John B. Vayns*

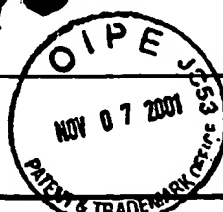
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Substitute for Form 1449A/PTO (Modi. (use as many sheets as necessary))		Attorney Docket No. 042390P3495C2	Application Number: 09/274,430
Page 6 of 11		First Named Inventor: Michael Barrow	
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JW		John U. Knickerbocker et al., "Materials: Ceramic BGA" Advanced Packing Magazine, January/February 1995, pgs 20-25	
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	J. S. Huang, "Reliability of BGA Solder Interconnections" Electronic Packaging & Production, Surface Mount, Vol. 8, No. 9, September 1994, pp 14-15		

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		Bruce Freyman et al., "Surface Mount Process Technology for Ball Grid Array Packaging" Surface Mount Technology Association, Journal of Surface Mount Technology, July 1994, pp 27-31	
		Randy Johnson et al., "Thermal Characterization of 140 and 225 Pin Ball Grid Array Packages", Nepcon East '93 Conference, Boston, Ma, June 1993	
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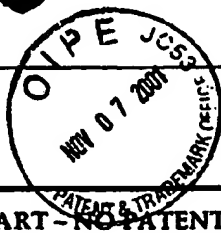
Examiner Signature	<i>John P. Vignata</i>	Date Considered	09/09/02
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\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

*Page No. 17*



First Named Inventor:  
Michael Barrow

Filing Date:  
March 22, 1999

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume, issue number(s), publisher, city and/or country where published	Translation <sup>2</sup>
JPV		Philip E. Rogren, "MCM-L Built on Ball Grid Array Formats", Surface Mount International, Proceedings of the Technical Program, San Jose, Ca, August/September 1994	
		James J. Clementi et al., "Flip-Chip Assembly on CQFP Using No-Clean Processing" Proceedings 1995 International Flip Chip, Ball Grid Array, Tab and Advanced Packaging Symposium, San Jose, Ca, February 1995	
		Andrew Mawerand et al., "Reliable BGAs Take on Extra Routes" Electronic Engineering Times 98, Interconnects & Packaging, Issue 816, September 194	
		Johnathan L. Houghten, "Plastic Ball-Grid Arrays Continue to Evolve", February 6, 1995 issue of Electronic Design, Vol. 43, No. 3, pgs 5, 7, 141-146, Penton Publishing Inc., Cleveland, OH	
		Compaq, "Compaq's Proposed BGA Package for Low Cost High Volume Products" (one page), November 8, 1993	
		LSI Logic, Package Selector Guid 1994-1995, cover page, chapter cover page, pgs 8-27 and 8-31	
		Semiconductor Group Package Outlines Reference Guide, First Edition 1995, cover page and pp 6-20, Arrow Schweber	
		BGA Product Guide Updates, Amkor/Anam, June 1994	
		Steve Liew et al., Fax to Mike Barrow regarding BGA Details, December 21, 1994, pgs 1-2	

Examiner Signature	<i>John P. Uygur</i>	Date Considered	02/02/02
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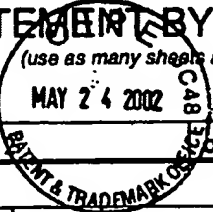
*Paper No. 117*

Paper No. 22

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

MAY 24 2002



Sheet 1 of 2

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## Complete If Known

Application Number	09/274,430
Filing Date	March 22, 1999
First Named Inventor:	Michael Barrow
Group Art Unit	2841
Examiner Name	David A. Foster <i>John Vignata</i>
Attorney Docket Number	042390P3495C2

## OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
<i>JV</i>		Bruce Freyman et al. "Surface Mount Process Technology for Ball Grid Array Packaging", Surface Mount International, August 29-September 2, 1993, Amkor Electronics Inc., San Jose, California, pgs 81-85	
<i>JV</i>		Johnathan L. Houghten "Plastic Ball-Grid Arrays Continue to Evolve", Electronic Design Magazine, February 6, 1995, pgs 141-146, Vol. 43, No. 3, Penton Publishing	
<i>JV</i>		LSI Logic Corporation, Package Selector Guide 1994-1995, Second Edition, Milpitas, California	
<i>JV</i>		LSI Logic Corporation, Package Selector Guide 1994-1995 Errata	
<i>JV</i>		Semiconductor Group Package Outlines Reference Guide, Texas Instruments Incorporated, Plastic Ball Grid Array Drawings, 1995	

Examiner Signature	<i>John B. Vignata</i>	Date Considered	09/09/02
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